

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 1, please replace paragraph 1 (lines 4-10) with the following:

This application claims benefit of priority to pending United States Patent Application Serial Number 09/636,104 filed August 10, 2000, entitled “Methods for Manipulating Moieties in Microfluidic Systems”, and to People’s Republic of China Patent Application 00122631.2, filed August 8, 2000, and to PCT Patent Application Number **(TO BE DETERMINED)** PCT/US00/25381 entitled “Method for Manipulating Moieties in Microfluidic Systems” filed September 15, 2000, and naming Xiaobo Wang, Lei Wu, Jing Cheng, Weiping Yang, and Junquan Yu as inventors, all herein incorporated by reference in their entireties.

On page 1, please replace paragraph 5 (lines 24-27) with the following:

United States Application Number **(TO BE DETERMINED)** 09/678,263 having attorney docket number ARTLNCO.002A, entitled “Apparatus for Switching and Manipulating Particles and Methods of Use Thereof” filed on October 3, 2000 and naming as inventors Xiaobo Wang, Weiping Yang, Junquan Xu, Jing Cheng, and Lei Wu;

On page 1, please replace paragraph 6 (lines 28-31) with the following:

United States Application Number **(TO BE DETERMINED)** 09/679,024 having attorney docket number 471842000400, entitled “Apparatuses Containing Multiple Active Force Generating Elements and Uses Thereof” filed October 4, 2000, and naming as inventors Xiaobo Wang, Jing Cheng, Lei Wu, Junquan Xu, and Weiping Yang.

On page 2, please replace paragraph 1 (lines 1-4) with the following:

United States Application Number (~~TO BE DETERMINED~~) 09/685,410 having attorney docket number ART-00104.P.1.1, filed October 10, 2000, entitled “Individually Addressable Micro-Electromagnetic Unit Array Chips in Horizontal Configurations” and naming Lei Wu, Xiaobo Wang, Jing Chen, Weiping Yang, YuXiang Zhou, LiTian Liu, and JunXuan Xu as inventors.

On page 2, please replace paragraph 2 (lines 5-8) with the following:

United States Provisional Application Number (~~TO BE DETERMINED~~) 60/239,299 having attorney docket number ART-00105.P.1, filed October 10, 2000, entitled “An Integrated Biochip System for Sample Preparation and Analysis” and naming Jing Cheng, Xiaobo Wang, Lei Wu, Weiping Yang, and Xiao Yu as inventors.

On page 52, please replace paragraph 1 (lines 1-4) with the following:

and corresponding PCT Application Number (~~TO BE DETERMINED~~) PCT/US00/25381, entitled “Method for Manipulating Moieties in Microfluidic Systems”, filed September 15, 2000, and naming Xiaobo Wang, Lei Wu, Jing Cheng, Weiping Yang, and Junquan Yu as inventors, and herein incorporated by reference in its entirety.

On page 53, please replace paragraph 2 (lines 8-22) with the following:

Separations with electromagnetic particles are performed on electromagnetic chips, where the source of the electromagnetic force is in part separate from the chip and in part integral to the chip. An electrical current source is external to an electromagnetic chip of the present invention, allowing the operator to control the electromagnetic force, whereas the electromagnetic elements are fabricated onto the chip. The electromagentic elements can produce magnetic fields and exert electromagnetic forces on magnetic particles. The electromagnetic elements can be of various structural geometries. For example, the

electromagnetic elements can be a loop of conducting material, such as metal, that goes around a ferromagnetic body and that can be sputtered, electroplated, or deposited on a chip. An electromagnetic chip can have one or more electromagnetic units as described in the U. S. Patent Application Serial No. 09/399,299, filed September 16, 1999 and U.S. Patent Application Serial No. (**TO BE DETERMINED**) 09/685,410 with attorney docket number ART-00104.P.1.1, filed October 10, 2000, entitled "Individually Addressable Micro-Electromagnetic Unit Array Chips in Horizontal Configurations" and naming Lei Wu, Xiaobo Wang, Jing Cheng, Weiping Yang, YuXiang Zhou, LiTian Liu, and JunQuan Xu as inventors, both herein incorporated by reference.